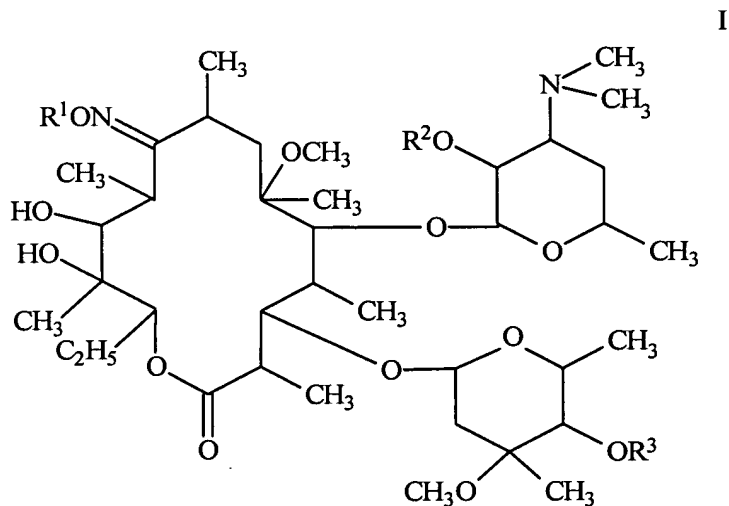


## IN THE CLAIMS

Please cancel claim 2 without prejudice to Applicants' right to pursue claim 2 in a continuing application.

Please amend the claims as follows:

1. (Amended): A process for preparing a 6-O-methylerythromycin A derivative represented by the formula:



wherein  $R^1$  is:

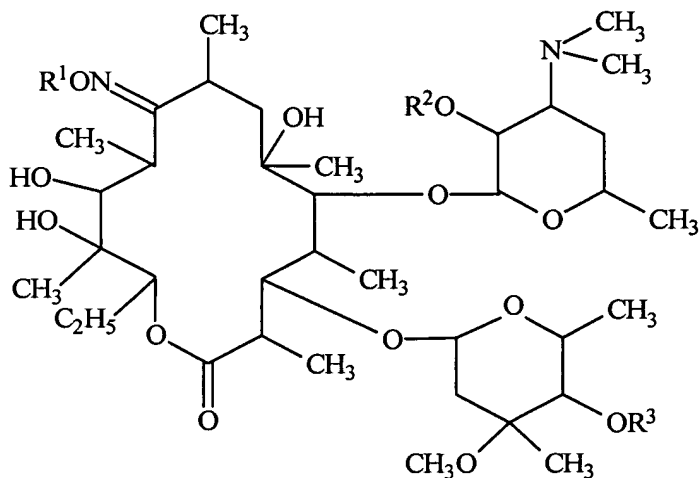
a 2-alkenyl group having 3 to 15 carbon atoms,

a benzyl group, or

a benzyl group [substituted] substituted by 1 to 3 of a chlorine atom, an alkoxy group having 1 to 4 carbon atoms, a nitro group or an alkoxycarbonyl group having 2 to 6 carbon atoms, and

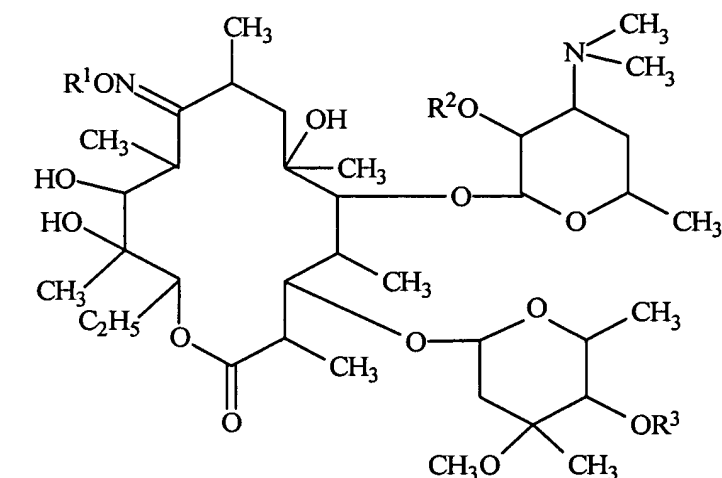
$R^2$  and  $R^3$  are trimethylsilyl,

which comprises reacting, in any desired sequence, erythromycin A 9-oxime with a compound of formula  $R^1-X$  (wherein  $R^1$  is as defined above, and X is a halogen atom) and with a substituted silylating agent having an  $R^2$  group to give a compound represented by the formula[;]:



(wherein  $R^1$ ,  $R^2$  and  $R^3$  are as defined above), and then reacting said compound of formula II with a methylating agent selected from the group consisting of methyl bromide, methyl iodide, dimethyl sulfate, methyl p-toluene sulfonate and methyl methane sulfonate, the amount of said methylating agent being 1-3 molar equivalents of said compound of formula II, said trimethylsilyl group ( $R^2$ ) protecting the 2' hydroxyl group against methylation and preventing the 3'-dimethylamino group from being quaternized with the methylating agent.

3. (Amended): A process for preparing 6-O-methylerythromycin A comprising:  
reacting, in any desired sequence, erythromycin A 9-oxime with a  
compound of formula  $R^1-X$  (wherein  $R^1$  is as defined below,  
and X is a halogen atom) and with a substituted silylating agent  
having an  $R^2$  group to give a compound represented by the  
formula:



wherein  $R^1$  is:

a 2-alkenyl group having 3 to 15 carbon atoms,

a benzyl group, or

a benzyl group substituted by 1 to 3 of a chlorine atom, an

alkoxy group having 1 to 4 carbon atoms, a nitro group or

an alkoxycarbonyl group having 2 to 6 carbon atoms, and

$R^2$  and  $R^3$  are trimethylsilyl;

then reacting said compound of formula II with a methylating

agent selected from the group consisting of methyl bromide,

methyl iodide, dimethyl sulfate, methyl p-toluene sulfonate and

methyl methane sulfonate, the amount of said methylating agent

being 1-3 molar equivalents of said compound of formula II, said

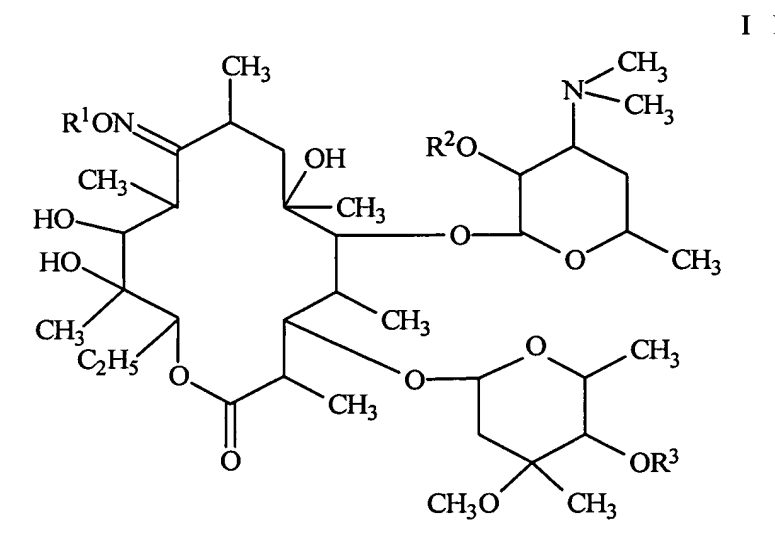
trimethylsilyl group ( $R^2$ ) protecting the 2' hydroxyl group against

methylation and preventing the 3'-dimethylamino group from

being quaternized with the methylating agent;

then eliminating in any desired sequence the R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup> groups,  
wherein the elimination of R<sup>1</sup> is performed by hydrogenolysis;  
and then, deoximating with a deoximating agent.

4. (Amended): A process for preparing 6-O-methylerythromycin A comprising:  
reacting, in any desired sequence, erythromycin A 9-oxime with a  
compound of formula R<sup>1</sup>—X (wherein R<sup>1</sup> is as defined below,  
and X is a halogen atom) and with a substituted silylating agent  
having an R<sup>2</sup> group to give a compound represented by the  
formula:



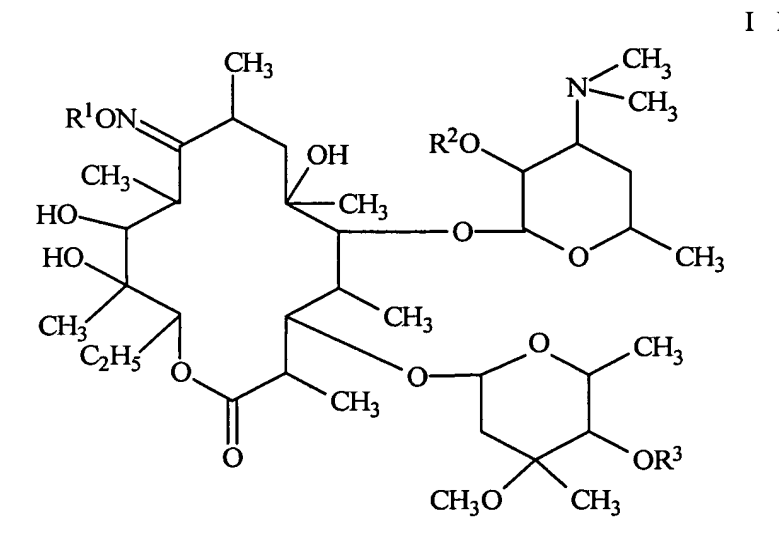
wherein R<sup>1</sup> is:

- a 2-alkenyl group having 3 to 15 carbon atoms,
- a benzyl group, or
- a benzyl group substituted by 1 to 3 of a chlorine atom, an
- alkoxy group having 1 to 4 carbon atoms, a nitro group or
- an alkoxycarbonyl group having 2 to 6 carbon atoms, and

R<sup>2</sup> and R<sup>3</sup> are trimethylsilyl;

then reacting said compound of formula II with a methylating agent selected from the group consisting of methyl bromide, methyl iodide, dimethyl sulfate, methyl p-toluene sulfonate and methyl methane sulfonate, the amount of said methylating agent being 1-3 molar equivalents of said compound of formula II, said trimethylsilyl group (R<sup>2</sup>) protecting the 2' hydroxyl group against methylation and preventing the 3'-dimethylamino group from being quaternized with the methylating agent;  
eliminating in any desired sequence the R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup> groups, wherein the elimination of R<sup>2</sup> and R<sup>3</sup> is performed by treatment with acid in an alcohol;  
and then, deoximating with a deoximating agent.

5. (Amended): A process for preparing 6-O-methylerythromycin A comprising:  
reacting, in any desired sequence, erythromycin A 9-oxime with a compound of formula R<sup>1</sup>—X (wherein R<sup>1</sup> is as defined below, and X is a halogen atom) and with a substituted silylating agent having an R<sup>2</sup> group to give a compound represented by the formula:



wherein R<sup>1</sup> is:

a 2-alkenyl group having 3 to 15 carbon atoms,

a benzyl group, or

a benzyl group substituted by 1 to 3 of a chlorine atom, an

alkoxy group having 1 to 4 carbon atoms, a nitro group or

an alkoxycarbonyl group having 2 to 6 carbon atoms, and

R<sup>2</sup> and R<sup>3</sup> are trimethylsilyl;

then reacting said compound of formula II with a methylating

agent selected from the group consisting of methyl bromide,

methyl iodide, dimethyl sulfate, methyl p-toluene sulfonate and

methyl methane sulfonate, the amount of said methylating agent

being 1-3 molar equivalents of said compound of formula II, said

trimethylsilyl group (R<sup>2</sup>) protecting the 2' hydroxyl group against

methylation and preventing the 3'-dimethylamino group from

being quaternized with the methylating agent;

eliminating in any desired sequence the R<sup>1</sup>, R<sup>2</sup>, and R<sup>3</sup> groups,  
wherein the elimination of R<sup>2</sup> and R<sup>3</sup> is performed by treatment  
with tetrabutyl ammoniumfluoride in tetrahydrofuran;  
and then, deoximating with a deoximating agent.